FACTORS INFLUENCE OSH ACCEPTANCE IN KENCANA TORSCO SDN BHD, SITIAWAN, PERAK

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Abstract

This research paper presents the success factor in the acceptance towards Occupational Safety and Health (OSH). OSH acceptance among human being can be varies among us and be influenced with certain factors. However, the study is to identify which factors that influences most in the success of Safety and Health in an organization. There are many sectors in Malaysia that are actually not really fully complying towards our Occupational safety and Health Act (OSHA) 1994 that can lead to many serious workplace incident and fatality as well. OSH is big terms that represent the company's backbone. The weak and strength of OSH in an organization will define the strength and weak the organization will be. Furthermore, OSH cannot move alone by itself, therefore the success of OSH at a workplace can be seen if there is two parties make the same approach and responsibilities that enable the OSH become more effective. This is all about management commitment and employees acceptance and support towards OSH. Therefore the objective of this paper is to find out what are the needs to improve OSH in the organization that are influenced by human factor.

Abstrak

Kertas kajian ini mendedahkan faktor kejayaan penerimaan terhadap Keselamatan dan Kesihatan Pekerjaan (OSH) . Penerimaan terhadap Keselamatan dan Kesihatan Pekerjaan (OSH) boleh dilihat dikalangan ketika sendiri dan juga dipengaruhi dengan pelbagai faktor.Walaubagaimanapun, tujuan kajian adalah untuk mengenalpasti faktor utama yang mempengaruhi kejayaan Keselamatan dan Kesihatan dalam sesebuah organisasi. Kebanyakan sektor di Malaysia tidak sepenuhnya mematuhi piawaian terhadap Akta Keselamatan dan Kesihatan Pekerjaan (OSH) 1994 dan ianya mendorong berlakunya kemalangan di tempat kerja serta kematian. Keselamatan dan Kesihatan Pekerjaan (OSH) merupakan tulang belakang sesebuah organisasi. Kelemahan dan kekuatan Keselamatan dan Kesihatan Pekerjaan (OSH) boleh membuktikan kegagalan dan kekukuhan dalam sesebuah organisasi tersebut. Tambahan lagi, Keselamatan dan Kesihatan Pekerjaan (OSH) tidak mampu bergerak secara sendirian, oleh yang demikian kejayaan Keselamatan dan Kesihatan Pekerjaan (OSH) boleh dilihat sekiranya dua pihak sepakat melaksanakan suatu pendekatan serta bertanggungjawab bagi membolehkan Keselamatan dan Kesihatan Pekerjaan (OSH) dapat dilaksanakan secara efektif. Ianya berkait rapat dengan komitment daripada pihak atasan serta penerimaan dan sokongan dari pekerja terhadap Keselamatan dan Kesihatan Pekerjaan (OSH). Justeru itu, objektif kertas kajian ini adalah untuk mengenalpasti kehendak atau matlamat dalam meningkatkan mutu Keselamatan dan Kesihatan Pekerjaan (OSH) dalam sesebuah organisasi dan ianya didorong oleh pengaruh manusia.

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TABLE OF CONTENTS

NO.	CONTENTS	PAGES
	PERMISSION TO USE	**iii**
	ABSTRACT	**iv**
	ABSTRAK	**v**
	ACKNOWLEDGEMENT	**vi**
	TABLE OF CONTENT	**vii**
	LIST OF TABLE	**xi**
	LIST OF FIGURE	**xiii**
	LIST OF ABRAVIATION	**xiv**
	Chapter 1 Introduction	
1.1	Introduction	1
1.2	Kencana Torsco Sdn Bhd	2
1.3	OSH Implementations in Kencana Torsco	4
1.4	Research Problem	5
1.5	Research Objectives	6
1.6	Research Questions	7
1.7	Significance of the Study	7
1.8	Time Limitations	8
1.9	Research Framework	9

Chapter 2 Literature review

2.1 Introduction 11

2.2 Employee's Safety and Health 11

2.3 Management Review and involvement in OSH Procedure acceptance among worker 13

2.4 Demographic factors in the level of acceptance of OSH procedures among employees 15

2.4.1 Age 16

2.4.2 Working Years 17

2.4.3 Gender 18

2.4.4 Training Attendance 18

2.5 Attitude & OSH Acceptance 19

2.6 Trainings & OSH Acceptance 22

2.7 Research Hypotheses 26

Chapter 3 Methodology

3.1 Introduction 28

3.2 Research Design 28

3.3 Research Population 29

3.4 Research Sample 29

3.5 Research Instrument 29

3.6 Procedure for Data Collection 31

3.7 Data Analysis 31

3.8 Pilot Test 33

3.8 Conclusion 34

Chapter 4 Result

4.0 Introduction 35

4.1 Respondent Rate 35

4.2 Reliability Analysis 36

4.3 Respondent Demography 36

4.3.1 Age Analysis 37

4.3.2 Employees Duration of Service Analysis 38

4.3.3 Safety Training Attendance Analysis 39

4.3.4 Educational Background 40

4.3.5 Occupational Level Analysis 41

4.4 Mean Analysis 41

4.5 Inferential Analysis 42

4.5.1 Hypotheses 1 43

4.5.2 Hypotheses 2 44

4.5.3 Hypotheses 3 45

4.5.4 Hypotheses 4 47

4.5.5 Hypotheses 5 50

4.5.6 Hypotheses 6 51

4.5.7 Hypotheses 7 52

4.6 Conclusion 54

Chapter 5 Discussion / Conclusion / recommendations

5.0 Introduction 56

5.1 Discussion 56

5.2 Recommendations 61

5.3 Limitations 64

5.4 Conclusion 64

REFERENCES 67

GLOSSARY 71

APPENDIX 78

LIST OF TABLES

Table 3.7	Score Range Distribution	33
Table 3.8	Reliability Test Result for Pilot Study	34
Table 4.2	Comparison of the Reliability Test between Actual Research and Pilot Study	36
Table 4.3.1	Respondents' Age Frequency	37
Table 4.3.2	Respondents Frequency on Duration of Service	38
Table 4.3.3	Respondents Frequency on Safety Training Attendance	39
Table: 4.3.4	Educational Background of Respondents	40
Table: 4.3.5	Level of Posts Held by Respondents	41
Table 4.4	Mean for Level of Acceptance and Application of Occupational Safety and Health Procedures, Employees Attitude and Safety Training Attended	41
Table 4.5.1	Pearson Correlation between attitude factor and level of Acceptance and application of occupational safety and health procedures.	43
Table 4.5.2	Pearson Correlation between safety training variable and level of OSH acceptance and application.	45
Table 4.5.3(a)	Mean for level of OSH procedures acceptance application for male and female employees.	46
Table 4.5.3(b)	T-test Analysis between gender variable and OSH procedures acceptance and application level.	46

Table 4.5.4(a)	Mean for level of acceptance and application of Occupational safety and health procedures for those who attend and do not attend OSH training.	48
Table 4.5.4(b)	T-Test Results for OSH training attendance with level of OSH procedures acceptance and application.	48
Table: 4.5.5	ANOVA analysis table for age factor with OSH procedures application and acceptance level.	50
Table 4.5.6	ANOVA analysis table for duration of service and OSH acceptance and application level.	51
Table 4.5.7:	Regression analysis table for attitude variable and OSH training.	52
Table 4.6	Summary of Findings	55

LIST OF FIGURES

Figure 1.9 Research Framework 9

LIST OF ABBREVIATIONS

No.	Abbreviations	Meaning
1.	°	Degree sign
2.	N	Frequency
3.	%	Percentage
4.	≥	More or equal to
5.	≤	Less or equal to
6.	r	Pearson Product Correlation Coefficient
7.	LBP	Low Back Pain
8.	ANOVA	Analysis of Variance
9.	CI	Confidence Interval
10.	H_1	Alternative Hypothesis
11.	H_0	Null Hypothesis
12.	HSAH	Hospital Sultan Abdul Halim, Sungai Petani.
13.	ICC	Intraclass Correlation Coefficient
14.	LS	Likert Scale
15.	MDT	Multidisciplinary Team
16.	NGRS	Numerical Graphic Rating Scale
17.	SD	Standard Deviation
18.	SPSS	Statistic Package for Social Science
19.	UUM	Universiti Utara Malaysia
20.	VAS	Visual Analog Scale

CHAPTER 1

INTRODUCTION

1.1 Introduction

This research is a case study in a local company in Lumut, Perak engaged mainly in oil and gas fabrication industry with large steel structural fabrication yards. The research is aimed to identify the level of acceptance and application of employees to Occupational Safety and Health (OSH) procedures in the organization. This research specifically also looked at the relationship of demographic factors such as gender, age, education, years of experience, training and employees attendance in safety training towards level of acceptance and application of employees towards Occupational Safety and Health (OSH) procedures.

Employers have a duty of care to ensure that employees and any other person who may be affected by the companies undertaking physical activities remain safe at all times. The employer must ensure the company maintains certain HSE standards at all times for the beneficial of the employees and empoyer itself. Hence the level of acceptance on the OSH policies and procedures are deemed vital to ensure nobody get hurts and as a pre requisite legal requirements. Employees acceptance towards OSH

implementations are vital to ensure the overall success of the company business in short.

The researcher based by his work experience as an OSH practitioner noted the acceptance level among the employees can varies because of many conditions. The concept of 'when you are in Rome, do like the Romans' can be adapted to OSH acceptance. OSH acceptance in general can be considered still low in Malaysia compare to other developed countries due to many factors too.

This study was conducted at Kencana Torsco Sdn. Bhd, Lumut, Perak.

1.2 Kencana Torsco Sdn. Bhd.

Kencana Torsco Sdn. Bhd. was established in 1992 engaging themselves in steel structural business mainly dealing with power plants, bridges and pressure vessels back then. The company had been bought over as one of its subsidiaries by Kencana Petroleum Berhad in 2007 and had started venturing into oil and gas industries since then. Kencana Torsco Sdn. Bhd. has strong capability to undertake turnkey or EPCC projects for the downstream oil and gas industry, infrastructure and steel fabrication works. The Company offers premium services through its three core strategic business portfolios:

1) Oil and Gas Division

2) Civil and Structure Division

3) Steel Fabrication Division

The services encompass a wide range of competencies, technology know-how and expertise in fulfilling the sophisticated requirements of the market.

Since its establishment, Kencana Torsco provides a range of engineering services to our customers; from design, consultancy services, and fabrication to turnkey construction, installation & commissioning of all disciplines both domestically and abroad. With cumulative experiences of over 30 years in this industry, Kencana Torsco have successfully established themselves as a reputable player in the market and has gained wide recognition from major oil and gas operators and industry leaders. Supported by the large and modern fabrication facility in Lumut Port Industrial Park, Sitiawan, Perak Darul Ridzuan, Malaysia, the sprawling yard space, geographical diversity and favorable raw material arrangement provide a resource-allocation pattern enabling them to take on various steel fabrication works for all industries including Oil & Gas and general industries as well as specialty engineering in aviation structures such as aircraft hangers.

Combining experience, capability and innovativeness, the Kencana Petroleum group of companies are able to provide their clients with one stop solutions for all the relevant stages of the oil and gas projects. Right now it has more than 100 office staffs

and approximate of 800 contract or production staffs to meet the global demand in this challenging industry.

It is vital for Kencana Torsco to have a high standard of OSH acceptance among her employees because the company business circles around it. Being an oil and gas player in the competitive industry market is alone enough for them to have a high level of acceptance. The risk of hazardous activities in the oil and gas sector is another factor as well. The OSH expectations and acceptance from its clients such as Petronas, Shell, ExxonMobil and Chevron as a pre requisite for any awarded contracts are the drive force to ensure OSH acceptance must be a continuity process for the company.

1.3 OSH Implementation in Kencana Torsco

This study looked at the relationship of demographic factors such as gender, age, education, years of experience, training and employees attendance in safety training towards level of acceptance and application among employees towards Occupational Safety and Health (OSH) procedures especially workers at the production unit which are highly exposed to chemicals and other dangerous substances.

Kencana Torsco gives importance to employees' safety and health issues. The main reason is to ensure excellent work quality and also to produce quality products for local and international market. Safety and quality has close relationship because practice the safety procedures among employees can increase work quality. Besides that, it also would reduce other costs such as compensation, medical costs and other

relevant costs. Good safety practices will increase company's productivity and also worker's safety.

Even though Kencana Torsco has sound and up to the industrial standard safety procedures, small accidents do happen during working hours. Small accidents here can be referred to any accident that requires the worker to rest not more than three days. These accidents still exist in the company, despite giving safety training for all the workers. This study looked at the acceptance level and application of safety and health procedures among employees especially in production unit. What are the relationships between gender, age, working period, safety training attendance, employees' attitude and safety trainings towards the acceptance level and application of safety and health procedures among employees at Kencana Torsco.

1.4 Research Problem

Over the past decade, the needs to meet the global demand of sound OSH implementation in the Oil and gas industry can't be denied after all. The challenges are simply because of the high risk associated within the activities, demands from the clients to pace up with the off shore requirements and staying competitive in the market. Being relatively a new player in oil and gas industry under the Kencana Petroleum wing, Kencana Torsco has a paramount task in meeting these demands. The challenges that lies ahead are not ordinary task; a successful OSH management will determine the success of the company performance overall in the future. One of the challenges in organization is to make Kencana Torsco a safe place to work.

The increase of small accidents is not because of any OSH procedures but because of employees' attitudes. Workers do not give much importance to safety rules that have been set by the company. This negative attitude can be related with the degree of acceptance of the procedures. How far OSH procedures are followed by the employees to avoid any mishaps at workplace? Some of the factor that always related with accidents at workplace is worker's attitude. Workers do not pay much attention on the importance of practicing safe working procedures. Their awareness is very low until they assume that OSH procedures are easy to be followed. Immediate actions need to be taken to change their attitudes in becoming more responsible and pay attention to safety features. Thus, this research will identify whether there are any significant relationship between employees' attitude with the acceptance level and application of OSH procedures among employees.

There are some experienced workers assume that they can avoid accidents from happening. These experienced workers use factors like duration go working years, gender, age and also employees' attendance in safety trainings as decisive factors of workplace accidents.

1.5 Research Objectives

The general objective of this research is to investigate the acceptance level and application of OSH procedures among Kencana Torsco‘s employees. Besides that, researcher would like to test all the hypotheses based on dependent and independent factors.

1. To identify the differences between the acceptance level and application of OSH procedures among employees with demographic factors like gender, age and working years.

2. To examine the relationship between attitudes factor in determining with the acceptance level and application of OSH procedures among employees.

3. To identify the relationship between training factors in OSH and with the acceptance level and application of OSH procedures among employees.

1.6 Research questions

There were questions raised up based by the research objectives on this study the determination of OSH acceptance will be measured to gain the appropriate findings and conclusion. This lists of questions mentioned were as follows:

a) What is the level of current OSH acceptance and compliance?

b) How does OSH acceptance can increase the productivity of the employees?

c) Are the current OSH procedures easy to be followed by all employees

d) How the employees see and accept training as part of their work?

1.5 Significance of the Study

This study is very important to determine Kencana Torsco's OSH management path in the future and as a new player in the oil and gas industry. The study is also important for the researcher, as it will be a benchmark and guidance for him to face and tackle all the specific problems that this research will reveal at the end of it. It will be used as a business strategy as well in the future by the management of Kencana Petroleum.

From this research also, we can identify characteristics of factors that has some relationship on the acceptance level and application of OSH procedures among employees. Employees could use information from this research to emphasize on factors that could increase or decrease the acceptance level and application of OSH procedures among employees.

1.8 Limitation

1.8.1. Time limitation

This research is focused only on the employees of Kencana Torsco Sdn. Bhd which is located at Sitiawan, Perak. Research was done in three months and this limited period prevented the researcher to investigate further.

1.8.2. Respondent's Cooperation

Strict working environment made difficult for respondents to give full cooperation in completing this study. Respondents took longer time to answer the questionnaire. However, their cooperation and help very much appreciated.

1.8.3. Sample did not represent population

This research is focused only on employees at production unit, where this did not represent the total amount of Kencana Torsco's workers. These samples are used because there are more prone to dangers while working.

1.9 Research Framework

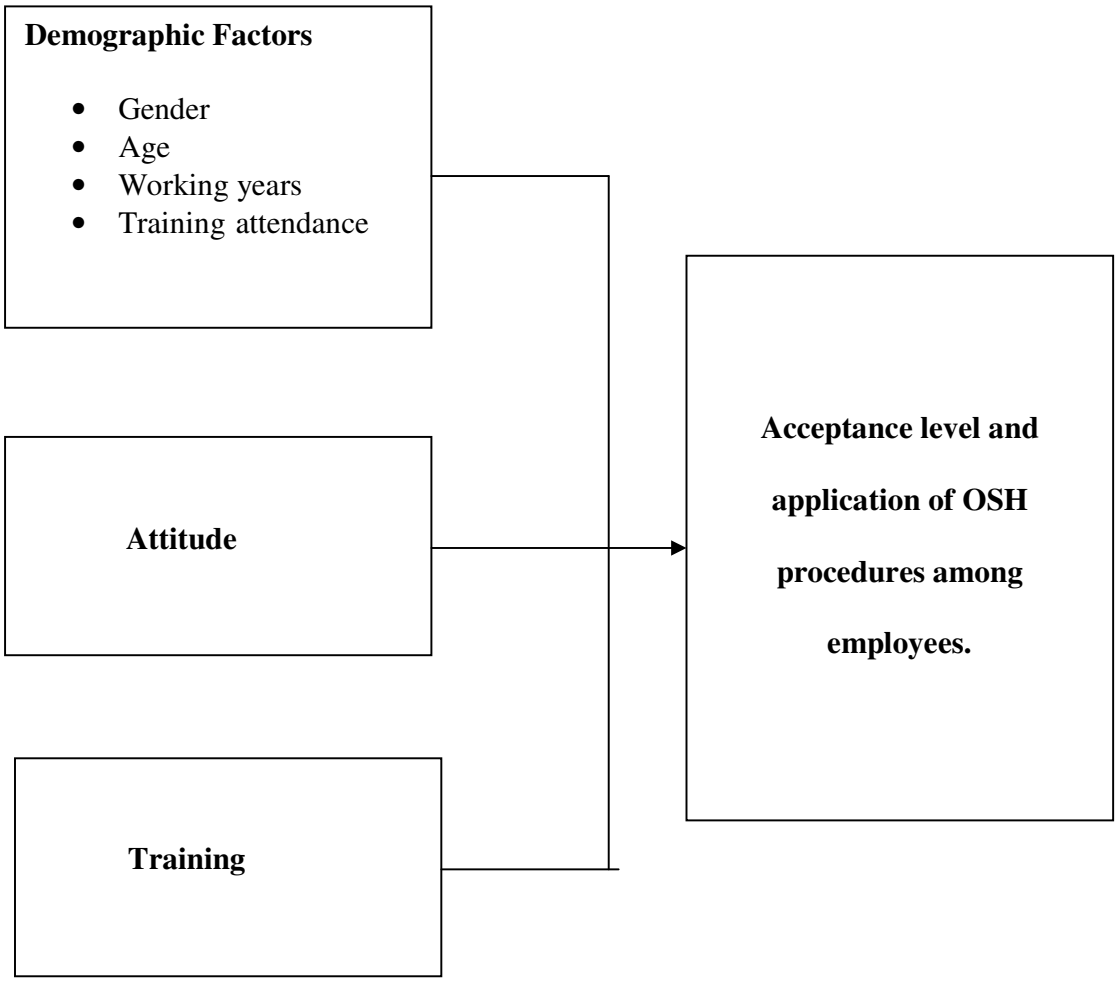

Figure 1.9: Research Framework

Research framework above allowed the researcher to choose three independent variables which are demographic factors, attitude and trainings. While dependent variable in this study is the acceptance level and application of OSH procedures. Demographic independent variables are divided into four categories which are gender, age, working years and training attendance. All these variables will be tested to see the

acceptance level and application of OSH procedures among Kencana Torsco employees.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This literature review covers operational definitions that describe variables that will be discussed in this study. The explanation includes safety and health issues, demographic factors, attitudes and others.

2.2 Employee's Safety and Health

Employees are the source or main factor to the effectiveness of organisation's success. In fact, employees are also considered the main asset towards country's development. Organisations may not achieve success if the workers' health and safety of the organisations are not well taken. The increase of awareness in OSH issues have long existed in Malaysia. From this awareness, Occupational Safety and Health Act 1994 were enforced. This shows how much employees' safety and health were given priority.

The objectives of the Act includes in securing the safety, health and welfare of person at work. Besides that, this Act also aims at protecting persons at workplace. OSH Act 1994 also stated duties of employers and self-employed persons to their employees. Government's interference in employees' safety and health issues is one

way to ensure that employers protect the rights of employees that is to work under safe environment. Smile (2006), stated that the government regulates occupational safety because of political, economical and societal needs even though government is not being involved in compensating workers.

Workers and employers usually have close relationship to ensure quality work progress. In addition, it not only involves task accomplishment but also communication in directing how to do the job accordingly. Boylston (1990), explained that every organisation expect their workers to perform their duties correctly all the time. Workers should be told the method to work safely. Failure in following the safety procedures reflects the failure in doing the task correctly. OSH is an important procedure in every operation of any organisations. The guidelines and enactment from DOSH actually reflects on producing these OSH procedures. Therefore these procedures would be most vital evidence to prove the duties done is safe or unsafe.

In order to cascade the procedure's information to the employees, the designated department such as the management and the Health, Safety & Environment (HSE) Department should join venture into sustaining employee's safety and health in the yard/workplace. According to Torp & Moen (2005), the investigated that the employees improved the health & safety management and also health related support and control upon involvement in the health & safety activities. This highlights the importance of the activities done in order to understand on health & safety matters.

2.3 Management Review and involvement in OSH Procedure acceptance among workers.

Management plays a vital role in implementing OSH Procedure and cascading the information to the workers either directly or indirectly. The importance of management in OSH will help the organization to minimize the level of accidents in the workplace or site. They should join venture with the safety management in order to improve the implementation of OSH procedure among workers.

According to Hovden (2008) study, the study demonstrates a lack of consistency between the employers and safety representatives. The employer rely more on the capacity of the formal health and safety management systems, than do the safety representatives who put more emphasis on the need for daily and continuous health and safety consultations. Fernández-Muñiz (2008) also investigated the effects of good practices in safety management. This study showed that safety management has a positive influence on safety performance, competitiveness performance, and economic-financial performance. The researchers of this study also provided evidence of the compatibility between worker protection and corporate competitiveness. Good safety and health practices do influence number of work related accidents. In addition to that Fernández-Muñiz (2009) emphasized that to achieve excellence in prevention, safety must be integrated into all the organisation's decisions and actions, and the prevention must be more organisational and strategic than material, given the important role that the human component plays in the causal chain of workplace accidents. Thus, firms need to implement a system to manage occupational risk prevention like the one

described above, foster the commitment and participation of all their members, and achieve the support of the top management.

According to Koh (1995), the management support is crucial to ensure the success of OSH promotion programmes and procedures. He also added that, top management in plants with the best health and safety records often state that they place the same emphasis on health and safety as on production and sales. When there is a lagging factor from the management towards the safety aspect, there wouldn't be any balance of importance and the workers will not give importance in the OSH procedures and programmes which allows them to neglect the OSH Procedures.

Besides that, management should always cooperate on every audit either internal or external to keep the procedures updated accordingly, according to the current regulations and requirements. The frequent review and updates will motivate not only the employees of the organizations but also the safety department personnel in sustaining the OSH Procedures and implementations. According to Hovdan (1999), the research actually states that the workshop that was conducted was not only designed to talk on the issues on worksite but also the power relation, and the alternatives of the consensus based human resources management approach versus a conflict and collaboration based representative approach. The opinions on this particular issue were divided both among the managers and the safety representatives, but everyone accepted the dilemmas involved in balancing between these health and safety approach not only in the OSH Procedures but also in the OSH Programmes. According to all the reviews

by all authors, we can conclude that the management's participation and review are vital in the acceptance of OSH Procedures among employees.

2.4 Demographic factors in the level of acceptance of OSH procedures among employees

Demographic factors are vital when it comes to humans. Employees has their own traits when comes to working. The demographic factor will directly influence the employee's trait of work when executing their job at work site. This factor contributes directly to the productivity and the quality of work executed. This relates closely to the acceptance of OSH Procedures among employees directly and indirectly. The healthy working culture should be instilled into the workers as this will be the drive for them to work safely. In order to maintain a safe work culture, definitely the employees should know the techniques on handling the machines or any other equipment in the yard safely.

The root cause which contributed to this safe work culture is by understanding and implementing the OSH Procedures. In this procedure, there are safety control measures which are in line with the working steps which helps the employees from getting injured. The procedures are very easy to comply to and it states in the type of PPE to be worn, and all the measures to follow in line with the hazards which pertains certain risk level. In building a safe work culture and also in producing a quality and more productive work, the implementation of OSH Procedures are vital.

Thus demographic factor generally are one of the most important factors in

determining the OSH Procedure exposure among employees. The demographic factors which are investigated are:

a) Age

b) Gender

c) Working years

d) Trainings

2.4.1 Age

Age is one of the most important factor which results in acceptance level of procedures among employees. Difference in ages possesses different accident rates in the company. According to the result from an analysis by Sawacha, Naoum, & Fong (1999), analysis of the results showed the workers between the ages 16 – 20 were more subjected to accident than others. The analysis tends to decline steadily after the age of 28 to reach a low point in the mid-forties. From this analysis also the age correlates with the experience whereby as the age increases with experience, the workers will be more vigilant on the safety. Cherns (1966) explained that as aging is a slow process, one can adjust to one's continually changing powers. Therefore when a worker tend to do a job when he was younger compared to his current age, he is much more capable to execute the work safely as he has complied to the OSH Procedures as time passes.

Age relationships to safety performance based on level of acceptance of the OSH procedures are analysed by a few other authors such as Bennett & Passmore (1986) and Maiti & Bhattacharjee (1999). They possess different results but came up a conclusion that the rate of injuries decreases with the increasing age as the awareness on OSH

Procedures increases with the age. The importance of OSH Procedure implementation and acceptance actually comes from within despite the trainings and awareness given. The workers that are well beyond their age are usually highly skilled in the activity executed which possesses fewer accidents in the workplace. The younger aged groups are more prone to accidents.

2.4.2 Working years

Experience is the best knowledge that a person needs in order to master any job or task. It is actually been proven by research that as the individual has more knowledge, they will tend to have much more awareness on their daily task and are able to comply to all the procedures, policies much more easily. According to Iverson (1997), the employees with higher experience generally are assigned to jobs as they have higher skill requirements, responsibilities and awareness of accident risks. The openness and experience based on McCrae & Costa (1985) are said to be defined as individuals with high level of originality and are broad minded. The employees who are experienced are capable of implementing and accepting the procedures much faster than those who are not experienced. Young workers' lack of experience, their physical and psychological immaturity and lack of awareness of OSH rules become additional sources of occupational risk (Breslin ,2007). There are certain individuals who could even lead and educate the less experienced people for the improvement of the company. This indirectly helps to implement the OSH procedures and also improve the growth of the company directly and indirectly.

2.4.3 Gender

Gender was given a special attention by many researchers as there are many differences when it comes to gender specifications. The difference can be in the manner of their physical attributes and psychological immaturity. The gender which is surveyed is male and female. As per the researches, the female are still handling the major part of family duties leading them to withstand extra stressors to the ones related to the working environment. Therefore they tend to have much more pressure due to the workload. Anyhow, females can interpret and listen to instructions better than male as female workers are much more patient. As male employees has a lot of influence from others especially their working colleagues. They are more vulnerable and are more sceptical in possessing accidents (Popkin, 2008)

2.4.4 Training attendance

Training attendance is also one of the important factors which influence the OSH acceptance within the employees. Employees who attend more training are subject to more knowledge as they have more exposure and coaching by the management. The more training they attend, the more they are able to accept the OSH Procedures into them. This will indirectly help them to minimize the accident at workplace. According to the latest study by Thanet Aksorn (2008), successful safety programs largely depend on employee involvement as workers tend to support the activities that they themselves help to create. Workers should be given the opportunities to provide input into the design and implementation of safety programs such as being a member of the safety committee, reporting hazards and unsafe practices to supervisors, identifying training needs, investigating accidents, etc.

2.5 Attitude and OSH acceptance

Human's traits can be defined through their attitude. Attitude of a human can be correlated directly and indirectly to the acceptance level of OSH Procedures among the workers. Every worker portrays different attitude when they are at the working environment. Workers spend almost 8 to 10 hours daily in their working area. Their attitude can be clearly seen when they are on site. There were many surveys done on the attitude of workers in accepting the OSH Procedures in the worksite. Working environment can change the attitude of the worker as well. This can directly results in injuries at worksite.

Safety environment are depending on the working environment. The safety attitudes of the workers are influenced by both environment and individual differences. It was even said via surveys that safety attitudes actually reflect emotionally towards safety policies, procedures and also practices (Griffin, 2006). According to Paul & Maiti (2007), one of the reasons for the increase of work injuries is the risk taking behaviour. Workers who are not satisfied with their job behave unsafely while working. This study implies that attitude plays a major role in safety and health issues in an organization.

Edwin (1998) stated that that unsafe behaviour is the most significant factor in the cause of site accidents and therefore proves evidence of poor safety culture. The implementation and acceptance level is very low when comes to this behaviour aspect. The analysis also added that in a case of wearing personal protective clothing at the workplace, the workers are reluctant to wear the safety clothing. Pirani & Reynolds (1976) made an analysis on it and found that the personal attitude of the employee results in the non-compliance to the safety clothing. This factor was supported by many

operatives who told that the non-compliance on wearing safety clothing is mainly on attitude problems. On the other hand, Paul, Sox & Theresa (2005) stated that there are three main behavioural aspects which are important in the acceptance of OSH Procedures among employees which are:

(a) Negative Affectivity

(b) Job Dissatisfaction

(c) Risk taking

(d) Type A behaviour patterns

Chronic experience of negative emotional states and lack of emotional stability is commonly referred as negative affectivity. It is stated that with negative affectivity, the tendency to do possess bad attitude to themselves and to others are certain. The different mood states, nervousness, and worry stages dwells a person to possess negative attributes which leads to more accidents at workplace. Employees who are going through these phases are much prone to lack in emotional stability and do not accept the OSH procedures. This research is added by Iverson (1997) who suggested that the negative affectivity might lead lapse in attention, thereby increasing the risk of injuries.

Maiti (2003) identified negative affectivity as a major safety problem in the underground coal mines. Through this, the employee's attributes on their own personal problem can contribute on the poor safe working culture and also can this can lead accidents in the workplace. Job dissatisfaction for the employees is one of the most common problems faced in any workplace. According to Quinn & Staines (1979), the employee's feelings towards their job are one of the factors they don't accept OSH

Procedures and this is classified as job dissatisfaction. The employee who possesses dissatisfaction definitely holds a negative attitude and behaviour about the job in the working environment (Robins 2001).

There were many researchers who have done their surveys on this dissatisfaction of job and accidents. They have concluded that, negative attitudes in the employees have high potential to cause accident at workplace. Without understanding the OSH Procedures, the employees do not know the hazards during the job executions. Due to the negligence while working this has mislead the employees to cause injuries to them. Lack of awareness on equipment due to the job dissatisfaction leads to many terrible incident and accident.

Some employees like to take risks in their workplace. This risk taking is a voluntary participation, not forced by any individual, which possesses some level of risks not only for the employee itself but also to others. Usually this risk taking is done when an employee was dared to do a task which involves high risk level. It could also include financial loss, injury or even fatality. This behaviour of risk taking has bad consequences and also it is influential to others. Maiti & Paul (2006) found that risk taking behaviours significantly led workers to be accident prone. The willingness to take a chance in executing the risk proves the employee is mentally and physically fit to face the challenge Cooper & Marshall, (1976).

In other term, some individual calls it as risk propensity as it is the extent to which individuals tend to take risks, seek adventure and engage risky behaviour as the

other authors told. However due to this risk behaviour, the employees would have a high potential to make harsh decisions which could contribute to injuries, incident, accident or even fatality (Costa & McCrae, 1991). These risk taking approaches that is referred are more to the sensation seeking to seek adventure. To be exact it describes one's optimal level of arousal and stimulation (Zuckerman 1994). The behaviour of employees is unpredictable and they are willing to do anything to seek attention from others.

Another attitude of being competitive and aggressive is eventually called as Type A behaviour pattern. They possess certain characteristics whereby there employees are very negligence on their work and very much careless when comes to work execution (Mohamed, 1999).This carelessness can mislead an individual to perform injuries easily. These types of people also are able to take risk and when they do accidents occur on site. This is because in certain situation, there would be urgency for the employee to finish certain work, but due to their carelessness, they tend to associate accidents together in their completion of work (Sutherland, 1991). In general, when comes to execution of any work, an employee has to have the patience in executing the task completely and correctly. When the individual rushes for the time, accidents can fall in place causing tremendous damage not only to the individual but also maybe to the properties that was dealt with. In a nutshell, it is clearly seen that all the negativity of type an individual relate closely to safety attitude. In this behaviour, a person will not be able to absorb any safety procedures or practices on their workplace.

2.6 Trainings and OSH Acceptance

Safety trainings are commonly also called as safety programmes. They have

several definitions and most of them are having similar interferences. Some trainings according to Anton (1989) said that safety programme are said to be defined as the control of environment, equipment, processes, and the workers for the purpose of reducing accidental injuries and losses in the workplace. Anton also identified that safety programs or trainings include comprehensive safety policies, safety committees, safety inductions, jobsite inspection, accident investigation, first aid programs, in-house safety rules, safety incentive schemes and many more.

Employment trainings are provided by all the employers. It is important to set training for the employees because these trainings can help to protest the employee's physical, psychological, and social health (Ferika Ozer Saria, 2009). These trainings have the ability to increase the employee's knowledge, skills and performance. The training experience that the employee's receive is good enough for them to lower the accidents at work, provide sufficient job security, lowering all the defected products. In addition to that, the maintenance and repair work of the equipment and products can be reduced dramatically and provide much more profit for the company. It is advisable also to inhibit social and humanistic goals for the employees as the will have more self-confidence and motivation within them. They will find it also as a security for employees in providing collaboration and coordination among the employees (Kaynak, 2003).

According to OSHA Act 514, section 15 (2)(c) it is stated that, it is the duty of every self- employed person to ensure, so far as practicable, the safety, health and welfare at work of all employees. The duties are extended whereby the employers should provide the provision of such information, instruction, training and supervision as is necessary to ensure, so far as is practicable, the safety and health at work of his

employees. In accordance to that, the employee's responsibilities are also stated in OSHA'A act. It is stated in Section 24 (1) (b) that employees are to cooperate with his employer or any other person in the discharge of any duty or requirement imposed on the employer or that other person by this act or any regulation made thereafter. This law clearly states he implementation of trainings in the workplace and also the commitment of the employees for the trainings. It is vital for the employees to attend these trainings and understand the law and the Act in Malaysia for their own benefit and self-guidance.

Winder (2009) stated that not all hazards in the workplace are visible in the same way. Some are dangers obvious because their impacts are direct and easily felt, such as physical workplace hazards. However others are indirect because the effects are long term from the original work process and some are hazards because their absence. This article emphasized on lack of safe systems of work which makes the workplace less safe. For this study, safe system in organizations can include safety trainings for the employees. Besides that, Arkson & Hadikusumo (2008) focused on the factors that will influence safety programs that conducted in the organizations. Researchers of this study stated to overcome such safety problems, safety program implementation has been given significant consideration as one of the effective methods. However, the effectiveness of safety programs depends on many factors. Findings for this study reveal that participants of safety programs stated that the most influential factor is management support. Thus, we can conclude employers have greater effect on the employees' perception.

According to Demir, (2005), there are three threats which are the problems collaborated with safety and health. It includes occupational accidents, occupational illness, and job stress. The trainings are the only source which could avoid these threats by starting the training on the very first day an employee is recruited. They should be feed with all the necessary information about their job scope and how to execute the job in a proper manner in order to reduce the risks of such accidents. Through these types of trainings, an employee will be able to control the stress and depression. Besides that, the workers would be able to delegate their job accordingly with more quality even though they have physical or spiritual defect. When additional trainings were given, certain areas should be focused in order to ensure the employees are trained in well manner and with full awareness on safety and health. The area which is important are:

(a) Job orientation

(b) General and Personal Hygiene

(c) First Aid

(d) Fire Drills

(e) Usage of Personal Protective Equipment

(f) Ergonomics

(g) Manual Handling

(h) Coping with Stress at work.

These training are important for continuous improvement for the employees and also to improve the awareness on safety and health procedures. This increased

awareness will not only increase their self-development but also to maintain the positive statistics in the workplace.

2.7 Research Hypotheses

Seven hypotheses have been designed based on the literature review. Ho is null hypothesis. Followings are the hypotheses of this study:

Ho 1 : There are no significant relationship between employees' attitude with the acceptance level and application of OSH procedures.

Ho 2 : There are no significant relationship between OSH trainings with the acceptance level and application of OSH procedures.

Ho 3 : There are no significant difference in acceptance level and application of OSH procedures based on gender.

Ho 4 : There are no significant difference in acceptance level and application of OSH procedures based on employees attendance in OSH safety trainings.

Ho 5 : There are no significant difference in acceptance level and application of OSH procedures based on age difference.

Ho 6 : There are no significant difference in acceptance level and application of

OSH procedures based on years of working.

Ho 7 : Independent variables like attitude and OSH safety trainings will not significantly influence the acceptance level and application of OSH procedures among employees.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This section explains the research procedures that used in this study. It involves elaboration on the instruments, methods of gathering the data and how data is analysed.

3.2 Research Design

This research was a quantitative research and parametric tests were used to identify the relationship between independent variables and dependent variable. It employed primary data through questionnaire distribution.

This study involved employees from the range of Managers to non-Executives staffs in Kencana's Office, Lumut, Perak. By identifying the target group of the study, the researcher indicated sampling frame and arranged it by different stratification. Random sampling procedures were employed then.

Questionnaires were distributed to the target group to gauge their understanding of each scenario mentioned which measured each variable. Each item in the questionnaire were categorised according to suitable dimensions. Parametric test was done in order to

accept or reject the hypothesis construct in this research to examine the correlation between independent and dependant variables.

3.3 Research Population

Research on acceptance level and application of OSH procedures among employees is focused in Kencana Torsco Sdn. Bhd. in Sitiawan only. Based from the information by the Contracts Manager of this company, there are approximate 800 workers overall for the time being that can be reduced or increased depending on the on going projects. However, researcher just emphasized staffs in the office as others are unavailable to respond to the research. The research was concentrated to permanent staffs only since these employees are working in the company for more than 2 years and much familiar with the safety procedures as compared to the temporary or contract staffs that will be base 1 year in the office. For this study the population is 140 which are the employees categorized as staffs and support staffs that mainly stationed in the office.

3.4 Sample

Out of the 140 questionnaire distributed, only 81 office staff obliged. Hence, making the sample size for this study 81.

3.5 Research Instrument

The instruments used in the questionnaire adapted and modified from James (1997) Descriptive analysis of forklift fatalities and powered industrial vehicle injuries and a case control of the characteristics of the vehicle, driver and environment, John

Hopkins University.

For this study, a questionnaire has been adapted and was divided into four parts. Part A consists of five items and is about respondents' profiles and demography information. Those items are mainly about gender, age, working years and attendance in safety trainings.

Part B that starts from Item B1 until Item B8 is about employees' attitude. Part C starts from Item C1 until C5 and questions are related with trainings and acceptance level and application of OSH procedures. Part D however is about level of acceptance and application of occupational safety and health procedures among employees. Part D has five items. Questions in Part B, C and D have positive and negative statements based on Likert scale as follows:

1 = Strongly disagree

2 = Disagree

3= Unsure

4= Agree

5= Strongly Agree

Workers need to choose the best answer based on the five options given. There are 18 statements in Part B, C and D. Total responds for each item showed respondents' attitude, trainings and acceptance level and application of OSH procedures in Kencana Torsco. Thus, if a respondent has obtained high score, it reflects that he or she has high attitude, training and high acceptance level.

3.6 Procedure for Data Collection

For this study, the first step is to get approval from Kencana Torsco Sdn. Bhd. Approval matters were handled through telephone conversation and face to face meetings. Since the researcher also the employee of Kencana Torsco, so no formal letters were required to conduct this study. However, researcher was allowed to email to their main Human Resource Officer for fast dealings.

The researcher has given the questionnaire to the respondents by hand that was randomly chosen. The researcher gave the questionnaire to his subordinates; therefore the respondents took their time in completing the questionnaire. The duration given for the respondent to complete the questionnaire was approximately 1 week. As the employees of the organisation, background information of the company was gathered easily. All the completed questionnaire forms were checked first to ensure that respondents followed the instruction and gave the complete information.

3.7 Data Analysis

Two types of data analyses were conducted using SPSS version 16, descriptive analyses and inferential statistic. SPSS was used to check the reliability level for each item with alpha value more than 0.6. Next, the descriptive statistic will give be based on the whole data. However, analyses are limited to the sample not the whole population of Kencana Torsco. This study involved total score analysis, percentage, average, minimum and standard deviation. This analysis is used to show the composition factors of demographic factors towards certain variables.

Besides that, inferential statistic allowed differentiation or generalisations made to bigger groups from the data collected. Pearson Correlation, T-Test, One way ANOVA and also regression test were used in this study. These methods test all the hypotheses stated in chapter 1. In general, Pearson correlation is used to test first and second hypotheses. It explains positive or negative relationships between variables in this study such as employees' attitude and OSH trainings with the levels of acceptance and application of OSH procedures among employees.

T-Test were used to test the third and fourth hypotheses that involve comparison between average score between two groups, which are gender with the levels of acceptance and application of OSH procedures among employees. Another group is the attendance in safety trainings with the levels of acceptance and application of OSH procedures among employees.

One-Way ANOVA was used to test fifth and sixth hypothesis. The test was between the levels of acceptance and application of OSH procedures and age factor and also working years. This allowed the researcher to do comparison between two factors simultaneously.

Regression analysis was used to test the last hypothesis. This analysis tested variables that could predict the levels of acceptance and application of OSH procedures among employees like attitude, OSH trainings. The significant level for this study is ($P < 0.05$).

The level of attitude, training and acceptance of the staffs is divided into three: low, moderate and high. The level is measured based on mean score. The range distribution for each level is represented in table 3.7

Table 3.7: *Score Range Distribution*

Attitude, Training and Acceptance level	Score Range
Low	1.00-2.33
Moderate	2.34- 3.66
High	3.67-5.00

Source: Abdul Kudus (2000)

3.8 Pilot Test

A pilot study is a smaller version of a larger study that is conducted to prepare for that study. A pilot study can involve pretesting a research tool, like a new data collection method.

Cronbach‘s Alpha is used to test all the independent variables (communication skills, usage of power, decision making skills and personal character) and dependent variables (leadership effectiveness) show that more than 0.6. It is considered good because it is not less than 0.6, of which instrument been used, assumed not reliable.
In this study, a pilot study was conducted to test the reliability of both, dependent and independent variables of the items constructed and to ensure whether all instructions in the questionnaires given can be understood. The reliability of these items can be tested through Cronbach‘s Alpha. The questionnaire was pretested to 20 staffs of Kencana Torsco Sdn. Bhd.

The results of the reliability test were as in Table 3.6. The pilot test results analyses are processed using reliability coefficient found in IBM SPSS 16.0 program. The results are stated in table 3.8 below:

Table 3.8: *Reliability Test Results for Pilot Study*

Variable	Nu. Of Items	Alpha Value
ATTITUDE	8	.924
TRAINING	5	.866
ACCEPTANCE AND APPLICATION	5	.863

Based on the reliability test results above, the Cronbach's alpha value for transformational leadership is 0.924 of which the items in variables range between 0.710-0.838. The Cronbach's alpha for items for job satisfaction is 0.866 and items for motivation is 0.863. The alpha coefficient for the three variables is more than 0.7, suggesting that the items have relatively high internal consistency.

3.9 Conclusion

This study investigated acceptance level and application level of OSH procedures among employees in Kencana Torsco Sdn. Bhd. This chapter suggested the details of the study. When the research was carried out and implemented on the target group, the hypotheses stated before were stated.

CHAPTER 4

RESULTS AND DATA ANALYSIS

4.0 Introduction

This chapter presents the findings which include the respondents' demography, descriptive statistics of attitude of employees, safety and occupational health training and level of acceptance and application of occupational safety and health procedures among employees and hypotheses test results.

4.1 Respondent Rate

The sample of this study is 81 although the population involved was 140. The response rate was only 58%. The response was quite poor due to many ongoing projects in the company that many staffs are not able to submit the questionnaires on time. Besides that, participants were required to answer the questionnaire sincerely and carefully. Many respondents were busy and reluctant to spend their time in answering the questionnaire. The commitments of the participants were vital for this study. These tasks required the employees to participate during their free time.

4.2 Reliability Analysis

The reliability coefficient (Cronbach's Alpha) was used to measure the actual reliability of research instrument. The results were then compared to the results obtained in the pilot study.

Based on the data in Table 4.1, it is found that the every variable display a strong reliability. The actual research shows a slighter less stronger reliability in all the variables compared to pilot study. The comparison of the reliability test is stated in table 4.2 below:

Table 4.2 *Comparison of the reliability test between actual research and pilot study*

Variable	Nu. Of Items	Alpha Value Pilot Study	Alpha Value Actual Research
ATTITUDE	8	.924	0.827
TRAINING	5	.866	0.739
ACCEPTANCE	5	.863	0.774

4.3 Respondent Demography

About 81 respondents returned the questionnaire and are used for the purpose of this study. This study comprises 34 female respondents and 47 male respondents. This is equivalent to 42% of female respondents and 58% of male respondents.

4.3.1. Age Analysis

Table 4.3.1: *Respondents' Age Frequency*

AGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	21	22.3	25.9	25.9
	26-35	30	31.9	37.0	63.0
	36-45	17	18.1	21.0	84.0
	46 and above	13	13.8	16.0	100.0
	Total	81	86.2	100.0	
Missing	System	13	13.8		
	Total	94	100.0		

The age groups of the respondents are divided into five categories: Between 18-25 years, between 26-25 years, between 36-45 years and above 46 years old. The highest number of respondents is 30 which belong to the 26 – 35 years of age. The lowest number of respondents is 13 which fall into the last category of age group which is 46 and above.

4.3.2 Employees Duration of Service Analysis

Table 4.3.2: *Respondents Frequency on Duration of Service*

DURATION OF SERVICE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-2 YEARS	33	35.1	40.7	40.7
	2-5 YEARS	27	28.7	33.3	74.1
	5-10 YEARS	13	13.8	16.0	90.1
	ABOVE 11 YEARS	8	8.5	9.9	100.0
	Total	81	86.2	100.0	

There are four categories of duration of service in the questionnaire. The highest number of respondents is in the 0-2 years' category, which is 33 (40.7%). The lowest number of respondents is in the above 11 years of service category, which is 8 or 9.9%. (Refer Table 4.3.2)

4.3.3 Safety Training Attendance Analysis

The data of this study indicates that the number of respondents who attended safety training is higher, which is 47 (58%) compared to those who have not attended which is 34 (42%). According to a Human Resource officer, the OSH training is conducted every 6 months. The number of respondents who have not attended maybe not informed or simply were not actively involved in the training.

Table 4.3.3: *Respondents Frequency on Safety Training Attendance*

ATTENDED SAFETY TRAINING

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	47	50.0	58.0	58.0
	NO	34	36.2	42.0	100.0
	Total	81	86.2	100.0	
Missing	System	13	13.8		
	Total	94	100.0		

4.3.4 Educational Background

Table: 4.3.4: *Educational Background of Respondents*

EDUCATION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	DEGREE OR ABOVE	21	22.3	25.9	25.9
	CERTIFICATE OR DIPLOMA	38	40.4	46.9	72.8
	SPM OR STPM	22	23.4	27.2	100.0
	Total	81	86.2	100.0	
Missing	System	13	13.8		
Total		94	100.0		

Referring to the table above, 21 respondents have degree which is 25.9%, 38 of them have a certificate or diploma (46.9%) and 22 (27.2%) respondents have SPM or STPM as their academic qualification.

4.3.5 Occupational Level Analysis

In this study, it is revealed that there are 4 respondents (4.9%) holding managerial posts and above, 16 respondents (19.8%) hold executive or above posts whereas the rest 61 respondents (75.3%) are the staff of this company.

Table 4.3.5: *Level of Posts Held by Respondents*

LEVEL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MANAGER OR ABOVE	4	4.3	4.9	4.9
	EXECUTIVE OR ABOVE	16	17.0	19.8	24.7
	NON EXECUTIVE	61	64.9	75.3	100.0
	Total	81	86.2	100.0	
Missing	System	13	13.8		
Total		94	100.0		

4.4 Mean Analysis

Table 4.4: *Mean for Level of Acceptance and Application of Occupational Safety and Health Procedures, Employees Attitude and Safety Training Attended*

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Attitude	81	3.38	4.63	324.75	4.0093	.22515
Training	81	3.60	4.80	348.00	4.2963	.28127
Acceptance	81	3.60	5.00	349.40	4.3136	.33755
Valid N (list wise)	81					

The above descriptive statistics reveal that overall level of acceptance and application of occupational safety and health procedures among the employees of Kencana Torsco is high. The high mean value at 4.3136 shows that the employees have high level of acceptance and application of occupational safety and health procedures at work. For safety training, the mean value stands at 4.2963. This indicates that the employees show positive reaction towards safety training that was conducted for them. In the aspect of employees' attitude, the mean value is 4.0093. This indicates that the attitudes of employees are at high level towards safety and health procedures. (Refer table 4.4).

4.5 Inferential Analysis

The analysis include t-test and correlation which tests seven hypotheses of this study. The findings are as follow.

4.5.1 Hypothesis 1 : There is a relationship between employees attitude with the acceptance level and application of OSH procedures.

Table 4.5.1 *Pearson Correlation between attitude factor and level of acceptance and application of occupational safety and health procedures.*

Correlations

		Attitude	Acceptance
Attitude	Pearson Correlation	1	0.7
	Sig. (2-tailed)		.01
	N	81	81
Acceptance	Pearson Correlation	0.7	1
	Sig. (2-tailed)	.01	
	N	81	81

**Correlation is significant at the 0.05 level (2-tailed).*

*** Correlation is significant at the 0.01 level (2-tailed).*

At significant level 0.05 (confidence interval 95%), there is enough evidence to reject Ho1 whereby attitude of employees has high correlation (0.7) with a significant level at 0.01 ($p<0.05$). This shows that there is a strong relationship between attitude of employees and acceptance and application OSH. Therefore, null hypothesis 1, there is no significant relationship between employees' attitude and level of OSH acceptance and application is rejected.

4.5.2 Hypothesis 2 : There is a relationship between OSH trainings with the acceptance level and application of OSH procedures

Table 4.5.2 *Pearson Correlation between safety training variable and level of OSH acceptance and application*

Correlations

		Acceptance	Training
Acceptance	Pearson Correlation	1	.715
	Sig. (2-tailed)		.04
	N	81	81
Training	Pearson Correlation	.715	1
	Sig. (2-tailed)	.04	
	N	81	81

**Correlation is significant at the 0.05 level (2-tailed).*

*** Correlation is significant at the 0.01 level (2-tailed).*

At significant level 0.05, there is enough evidence to reject Ho2 whereby safety training has high correlation level (0.715) with significant level at 0.04 ($p<0.05$). This indicates that there is a significant relationship between safety training and level of OSH acceptance and application among employees. Therefore, hypothesis null 2 which is there is no significant relationship between safety training and level of OSH acceptance and application is rejected.

4.5.3. Hypothesis 3: There is no difference in acceptance level and application of OSH procedures based by gender.

Hypothesis 3 is tested using T-Test between gender variable and OSH acceptance and application level among the employees. The mean of OSH procedures acceptance and application level for male and female employees is shown in Table 4.3.3a. It is found that the mean for level of OSH procedures acceptance and application is slightly higher in male employees (4.3234) compared to mean for female employees (4.3000). The t-test result of mean for male and female employees are indicated in table 4.6.3b.

Table 4.5.3 (a) *Mean for level of OSH procedures acceptance and application for male and female employees.*

Group Statistics

	GENDER	N	Mean	Std. Deviation	Std. Error Mean
Acceptance	MALE	47	4.3234	.33765	.04925
	FEMALE	34	4.3000	.34201	.05865

Table 4.5.3 (b) *T-test Analysis between gender variable and OSH procedures acceptance and application level*

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Acceptance	Equal variances assumed	.169	.682	.306	79	.760	.02340	.07643
	Equal variances not assumed			.306	70.719	.761	.02340	.07659

Table 4.5.3(b) shows that's there is no significant difference between level of acceptance and application of OSH procedures (p=0.760) among male and female employees at significant level p<0.05. This indicates that male employees have higher level of acceptance and application of safety procedure than female employees. Nevertheless, there is a limitation or biasness to test the differences in level of acceptance and application of occupational safety and health procedures and in this study whereby the number of male and female employees in this company is not the same. The number of male employees is higher than the female employees. However, on the whole, in this study, there is no significant difference in the level of acceptance and application of occupational safety and health procedures. Therefore, it is stated here that null hypothesis 3 which is there is no significant differences between gender variable and level of acceptance and application of occupational safety and health procedures among employees is accepted.

4.5.4 Hypothesis 4: There is difference in acceptance level and application of OSH procedures based on employees attendance in OSH safety trainings.

Hypothesis 4 is tested through T-test for safety training attendance variable and level of acceptance and application of occupational safety and health procedures among employees. The mean for level of acceptance and application of occupational safety and health procedures for employees who attend and do not attend OSH training is depicted in Table 4.5.4 a.

Table 4.5.4(a) *Mean for level of acceptance and application of occupational safety and health procedures for those who attend and do not attend OSH training*

Group Statistics

	ATTENDED SAFETY TRAINING	N	Mean	Std. Deviation	Std. Error Mean
Acceptance	YES	47	4.4000	.34891	.05089
	NO	34	4.1941	.28491	.04886

Table 4.5.4 (b) *T-Test Results for OSH training attendance with level of OSH procedures acceptance and application*

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Acceptance	Equal variances assumed	1.417	.237	2.825	79
	Equal variances not assumed			2.918	77.774

Independent Samples Test

		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
Acceptance	Equal variances assumed	.006	.20588	.07288
	Equal variances not assumed	.005	.20588	.07055

It is found that the mean for OSH procedures acceptance and application level for employees who attend OSH training (4.40) and those who did not attend (4.19) has high level of acceptance. The T-test results reveal there is a significant difference, whereby the p value stands at 0.006, which is below the significant level $p<0.05$. This indicates that attending safety training does make a significant difference with OSH procedures acceptance and application level.

Therefore, it can be deduced that hypothesis null (4) which is there is no difference in OSH procedures acceptance and application level among employees is rejected.

4.5.5 Hypothesis 5: There is no difference in acceptance level and application of OSH procedures based on age difference.

Table: 4.5.5 *ANOVA analysis table for age factor with OSH procedures application and acceptance level*

ANOVA

Acceptance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.417	3	.139	1.229	.305
Within Groups	8.698	77	.113		
Total	9.115	80			

From the table above, with an F-value 1.229 at significant level 0.305 ($p>0.05$), there is enough evidence to accept Ho5 whereby this situation indicates there is no significant difference between level of OSH procedures acceptance and application among employees and age factor (Refer table 4.3.5). The acceptance and application level of OSH procedures among the age group of 18-25, 36-35, 36-45 and 46 above is the same.

Therefore, it can be deduced that null hypothesis 5 which is there is no difference in level of OSH procedures acceptance and application among employees

according to age is accepted.

4.5.6 Hypothesis 6: There is a difference in acceptance level and application of OSH procedures based on years of working.

Table 4.5.6 *ANOVA analysis table for duration of service and OSH acceptance and application level*

ANOVA

Acceptance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.730	3	.243	2.234	.001
Within Groups	8.385	77	.109		
Total	9.115	80			

Based on table 4.5.6 above, the F-Value stands at 2.2234 with a significant value of 0.001. The mean difference is significant at the 0.05 level. This indicates, overall in this study, there is a significant difference between duration of service and OSH procedures acceptance and application level. Therefore, there is enough evidence to reject Ho6. Moreover, there is a difference for those who have served between 0-2 years and above 11 years with a significant value of 0.016. There is also difference for those who serve between 2-5 years and above 11 years with a significant value of 0.030. The rest of the groups which are 0-2 years, 2-5 years and 5-10 years showed no

significant difference in duration of service and OSH procedures acceptance and application level.

On the whole, hypothesis null 6, which is there is no significant difference between level of OSH acceptance and application among employees according to duration of service is rejected.

4.7 Hypothesis 7: Independent variables like attitude and OSH safety trainings will significantly influence the acceptance level and application of OSH procedures among employees.

Table 4.5.7: *Regression analysis table for attitude variable and OSH training*

(a)Model Summary of Coefficient Correlation R

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.215[a]	.46	.22	.33384

a. Predictors: (Constant), Training, Attitude

(b) ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.422	2	.211	1.894	.000[a]
	Residual	8.693	78	.111		
	Total	9.115	80			

a. Predictors: (Constant), Training, Attitude

b. Dependent Variable: Acceptance

(c) Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.228	.856		3.773	.000
	Attitude	-.006	.166	-.004	-.038	.970
	Training	.258	.133	.215	1.945	.055

a. Dependent Variable: Acceptance

From table 4.5.7, R square value that has been obtained is 0.46. This shows that the dependable variable (DV) which is OSH procedure acceptance and application

level among employees has correlation between predictor variable which are employees' attitude and OSH training at a variation value of 46%. About 54% is influenced by other predictor variables.

This also indicates that 46% of R square variant in level of OSH procedures acceptance and application among employees can be explained significantly by both predictor variables attitude and training. The 54% shall depends from other various factors. From table 4.5.7 (c), the predictor variables: attitude and OSH training are important factors which influence the level of OSH procedures acceptance and application among employees at Kencana.

The Anova table shows the F-Value as 1.894 which is significant at level 0.000 ($p<0.05$). Therefore, with this there is enough evidence to reject null hypothesis 7 which is the predictor variables, attitude and training do not significantly influence towards level of OSH procedures acceptance and application among employees.

4.6 Conclusion

Table 4.6 *Summary of Findings*

H1	There is a relationship between employees attitude with the acceptance level and application of OSH procedures.	Rejected
H2	There is a relationship between OSH trainings with the acceptance level and application of OSH procedures	Rejected
H3	There is no difference in acceptance level and application of OSH procedures based by gender.	Accepted
H4	There is difference in acceptance level and application of OSH procedures based on employees attendance in OSH safety trainings.	Rejected
H5	There is no difference in acceptance level and application of OSH procedures based on age difference	Accepted
H6	There is a difference in acceptance level and application of OSH procedures based on years of working.	Rejected
H7	Independent variables like attitude and OSH safety trainings will significantly influence the acceptance level and application of OSH procedures among employees.	Rejected

From the above findings, the demographic factor such as age and gender do not significantly influence the acceptance level and application of OSH. However, correlation analysis concludes that all the independent variables i.e training and attitude are significantly related to employees engagement and application of OSH.

CHAPTER 5

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter constitutes the summary, discussion and recommendations of the study. The purpose of this study is to find out the relationship between attitude and training and level of OSH procedures acceptance and application among employees of Kencana. This study was carried out through the medium of literature survey and subsequently elaborated and extended upon through a quantitative method.

This chapter is important to discuss the issues that might be raised based on the decision made. It will help to discuss the best resolution to overcome problems that might arise in OSH procedures acceptance and application level. Through discussion, conclusion and suggestions made, researcher and Kencana organization management will be able to use the information for future reference.

5.1 Discussion

This study is carried out specifically for employees of Kencana Kg Acheh, Perak. Study on factors related to employees' demography, attitude and OSH training

influence their level of OSH procedures acceptance and application. Based on the data derived from the questionnaire, factors that are topic of the study has significance in finding out the answered on questions raised. On the whole, demography factors, attitude and OSH training has relationship with level of procedures acceptance and application among employees.

The analysis of the study reveals that not all the demography factors have influence in the level of OSH procedures acceptance and application level among employees. For example, results indicate that there is a difference in level of OSH procedure acceptance and application among employees whether they have attended the safety course or not. Generally, the workers display positive response towards OSH procedures acceptance and application, knowing well safety and health is a priority at work. According to Abraham Maslow theory, the first level of human basic needs is food, clothes and shelter. Shelter provides safety. This is indicates that the need to be safe is natural in human, regardless of being exposed to training or not. Being exposed to training elevates their level of OSH procedures acceptance and application.

From the aspect of gender, there is no significant difference between level of acceptance and application of OSH procedures among male and female employees. This could be due to the small difference between male and female workers involved in this study. Furthermore, both male and female workers are capable of handling tasks designated with care. This finding supports Hyde' study (1981), that indicates there is no difference in male and female workers in terms of capability and ability. Beside this, most employees in Kencana are trained that same module regardless of gender and thus

make it no difference. All the employees have been briefed on all the hazards around their workplace thus it does not create any big difference in gender factor.

From the aspect of duration of service, there is significant difference between duration of service and OSH procedures acceptance and application level. The duration of service between 0-2 years comprise the highest number of employees which is 40.7% and the least would be above 11 years about 9.9%. This indicates the company aims to increase its productivity by constantly employing new workers. Although there is no significant difference in the level of OSH procedures acceptance and application for employees below 11 years, those who have been working more than 11 year display any significant difference in the level of OSH acceptance and application. This could be due to the nature of the task and experience that enable them to grasp and apply the safety procedures at ease. The 'newcomers' can be described as risk takers and sometimes the natural instinct to complete the task faster may influence their safety performance. This is not the same with the 'old' employees whereby, they will be more meticulous in the way they perform their job. But one should be warned against complacency though.

From the age factor point of view, there is no significant difference between the level of OSH procedures acceptance and application among employees. This could be due to the OSH procedure training provided is the same for all the age category, therefore, every employee has an equal role to play towards the productivity of the company. The number of employees for the age group 26-35 is the highest about 37%. This age group is mostly those who have had some previous job experience. Hence,

they are able to absorb and receive the skills needed to operate the company. For the age group of 36 and above, they are found to have a satisfactory realization level to take orders and carry out tasks and adhere the safety procedure set by the company. In the lower age group between 18 and 25 years old, they are still in the learning process and able to be moulded easily to accept and apply the OSH procedures of the company.

Attitude is that exists in an individual. It can be leant, emulated and influenced depending on one's surrounding. The attitude of Kencana employees is moderate towards OSH procedure on the whole. They seemed to be relaxed in emphasizing rules and OSH procedures strictly in the working premises. However, they did not ignore safety rules totally. They believe they could protect themselves and are able to take care of their health without having to be told. The haste in completing a task would sometimes make them forget about safety and rules. Positive attitude would enhance the level of OSH procedures acceptance and application among employees. If they choose to ignore these rules, accidents are most likely to happen especially towards employees who have low levels of OSH procedures acceptance.

In this study the employees' attitude does not show any significant relationship towards acceptance and application of OSH procedures. The findings based on the questionnaire reveal that all employees agree that safety procedures set by the company is easy to be followed. Hence, employees are at ease in accepting and applying the OSH procedures at work. Most employees find that it is easy to use safety equipments provided by the company. But, it is unknown whether they do really utilise the equipment's provided.

However, many agree that it is necessary to take shortcuts to get their work done. This could be due to time constraint and deadline to be met. Meanwhile, many did not agree that they do not think of safety even if they think they will not be caught. They do have safety in minds even when they are not being supervised. This indicates that the Kencana employees are very discipline and strictly follow the OSH procedures set by the company. Many believe that that safety should have a high priority to all employees. Many agree that it is important to follow safety procedures even when they believe that they will not be any mishaps. This indicates that OSH procedures are greatly practiced in this company. They too, agree that should any mishap or accidents happen they ought to inform the supervisor immediately. Since attitude plays a significant role in the acceptance and application of safety procedures in this company, the role played by the administration is crucial to enhance positive attitude towards acceptance and application of OSH procedures among employees. This is because the OSH administration must always be simple, easy to comprehend and relevant to all.

Training is another factor which determines the level of OSH procedures acceptance and application among employees. Training that has elements of OSH procedures is to expose them to dangers of works, accident risks that can harm the safety and health of employees. The training not only focuses on getting the work done the right way but how to handle accident cases, face emergency situations such as administration of CPR to an injured colleague, to handle fire cases and prevent fire from happening. The trainings provide employees positive perception towards the safety elements by creating awareness on the importance of OSH at work. If at all, the

training of OSH helps them, for sure their level of OSH procedures acceptance and application will increase. This study tries to reveal whether there is significant relationship between OSH training and level of OSH procedures acceptance and application among employees. If it is found that OSH training helps them, it would be depicted by the mean value. The mean value of 4.2963 indicates safety training helps them in the acceptance and application of OSH procedures in their daily work. The findings also reveal that there is a significant relationship between safety training and level of OSH acceptance and application among employees. Safety training will create the awareness and enhance the OSH knowledge and the importance of it; hence the OSH acceptance will indirectly increase to all the employees.

Many factors influence this relationship such as the training provided allows them to upgrade their skills and elevate their safety and health level. With proper and sufficient training of OSH, they are able to apply safety elements and OSH procedures at work. This boosts the confidence among employees in doing their work and believes that obeying safety rules would evade unnecessary injury or accident.

5.2 Recommendations

From the seven null hypotheses tested, two of them is not supported and five hypotheses are supported and accepted. Based on the Regression analysis test, that shows that the attitude factor and training factor do not significantly influence the level of OSH procedures acceptance and application among the employees in Kencana. Statistically, the level of OSH procedures acceptance and application is high because the level of acceptance and application is supported by rules and regulations of the

company that requires them to conform to every rules and regulations to maintain the achievement of quality. Therefore, to assist the management to find out the factors that contribute the most to level of OSH procedures acceptance and application, further research has to be conducted and studies on other factors that has stronger influence towards the level of OSH procedures acceptance and application has to be carried out.

Apart from that, the analysis indicates there is a significant difference between those who attended safety training and those who did not attend formal safety training. Safety training does influence the level of OSH procedures acceptance and application. The exposure during the training creates an awareness to be more alert and sensitive in their surroundings. Training does elevate their level of OSH procedures acceptance and application. Apart from daily emphasis on safety and daily experience at work, formal training has to be conducted as a part of job routine. Only through formal training, would they know whether they really are well equipped with safety knowledge and whether they are safety conscious. It is suggested that the employees be made aware on how to handle safety threats such as fire, explosion, and first aid should there be an emergency or injury. Even though every company has its own rescue team, workers ought to be exposed thoroughly at least on how to administer or treat minor injuries.

It is evident that the analysis indicates that attitude and safety training variables do not have a significant relationship on the level of OSH procedures acceptance and application among employees. This is important information to the management to increase the level of OSH procedures among employees. Good attitude can be inculcated and emulated unconditionally if one is constantly exposed to a positive

surrounding. The company ought to undertake the necessary steps to increase a positive attitude among employees. Apart from that reminder should always be given on the importance of safety and health by giving a briefing daily before work. Mass media such as video viewing, organization bulletin, posters and pamphlets also play an important role in imparting safety message. Being an important influence, the administration should ensure everyone attends safety training. Every employee regardless of years of service should attend every safety training conducted. Noting the importance and significance of safety training, the company ought to conduct safety training more frequently to enhance the level of OSH procedures acceptance and application.

T T-Test was used to test level of safety acceptance and application among employees according to gender and the one-way ANOVA test was used to show differences between the age factor and duration of service for the same purpose. The result indicates that there is no significant relationship in the level of OSH procedures acceptance and application. This information is crucial to determine emphasis to be given to the factors that influence significantly towards the level of acceptance and application among employees. For example, by testing gender variables, the company would be able to find out which gender has lower acceptance and application level. Hence, more attention can be paid to this group to encourage them to take part in more training activities or seminars. Similarly, to the age and duration of service category, who did not accept and apply the OSH procedures, more attention should be paid to them.

These are some suggestions meant specifically for the company, but for research purpose, a research on OSH to be broadened by the researcher. This is mainly because few researches are conducted in this field especially in the Malaysian working environment. In the research that has been carried out, it is hoped that other factors that contribute to the level of OSH acceptance and application be broadened. For example, in the study, only limited demography factors were taken into account. Future research should include level of education, difficultly of job, age category and other. This will help provide a clearer picture on the issues studied. Apart from this, a specific study needs to be conducted on the level of oil and gas industry risk factors whereby the risk in generally high compare to other industries.

5.3 Limitations

The study was conducted within staffs that are mostly office based only for most of the time. There are numbers of staffs whom has restricted time to come back to office, hence hampering their time to respond to the research.

Time limitation is another factor too. Most staffs are really busy with multiple ongoing projects that might have an effect on their time answering the questions thoroughly

5.4 Conclusion

Based on the objectives earlier in the study, there are three specific objectives to be achieved by the researcher. The researcher wishes to find out what is the implication

that might happen which is is there a connection and differences between variables such as demography, attitude and training in OSH towards acceptance and application level among employees.

After conducting this study and analyzing data that has been obtained, we can conclude that respondents demography characteristics namely attitude, OSH training, duration of service and training attendance has a significant relationship between OSH procedures acceptance and application level.

For the gender characteristics, it is found that there is no significant difference between gender and level of OSH procedures acceptance and application among employees. This indicates that male and female employees have the same level of OSH procedures acceptance and application. The age factor also reveals that there is no difference in level of OSH procedures acceptance and application. The duration of service also reveals that there is a significant difference in level of OSH procedures acceptance and application and years of service. Attending does have significant difference in level of OSH procedures acceptance and application as well. This shows that the level of acceptance and application of OSH procedures is still high; noting that practicing safety is mandatory and warning has been given from time to time.

The attitude factor that was studied indicates that employee's attitude with level of OSH procedures acceptance and application does have a significant relationship between each other. If they display a positive attitude towards safety and health, therefore the level of acceptance and application towards OSH procedures is high too,

and vice versa. Therefore, companies ought to instill positive value and attitude among employees towards safety and health. This is done in Kencana by having Safety seminars, campaign and incentives to all employees all around to increase to posite attitude and safety culture among all.

Nevertheless, the safety training factor has a significant relationship with level of OSH procedures acceptance and application. The training provided helps employees to enhance their level of OSH procedures acceptance and application at work. There are many trainings been conducted in Kencana, namely in house training, third party training, competency training and awareness training.

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